

ABSTRACT OF THE DISCLOSURE

The fact is utilized that a threshold at which the degassing amount will steeply change upon variations in SiH content exists in the relation between the hydrophobic SiH content of an HSQ (Hydrogen SilsesQuioxane) film and the degassing amount from the HSQ film. An HSQ film having a relative SiH content or absolute H content so as to correspond to the threshold or more is used as one insulating layer in an insulating interlayer. The hygroscopicity of the HSQ film is reduced to suppress any line defects that are considered to be generated in an upper insulating layer owing to elimination of a hygroscopic component. Satisfied are both the demand for improving the reliability of a small contact hole and the demand for suppressing any interconnection delay. The integration degree of a semiconductor device can easily and reliably be increased.